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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,230	03/26/2004	Seshadri Ganguli	005975/P2	8995

44257 7590 07/15/2008  
PATTERSON & SHERIDAN, LLP - - APPM/TX  
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HOUSTON, TX 77056

EXAMINER
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STOUFFER, KELLY M

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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07/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 8 July 2008 have been fully considered but they are not persuasive. The applicant argues against the examiner's labeling of the reducing agents as traditional reducing agents. However, as was stated in the previous office action, this has been admitted by the instant specification in paragraph 0068 using the terminology "traditional reductants." The applicant argues that Aaltonen et al. and Kawano et al. use different reducing agents and hence are not combinable. However, Kawano et al. is only shown to use a different ruthenium precursor, the reducing agents would not preclude someone from using the other invention, in fact one of ordinary skill in the art could easily grasp that the oxygen that either reduces or oxidizes ruthenium compounds depends heavily on process conditions. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Aaltonen et al. to include the precursors of Kawano et al. in order to use a precursor that gives the benefit of low temperature deposition and ease of supply. It also would have been obvious at the time of the invention to use CVD processes in an ALD process because "a person of ordinary skill has good reason to pursue the known options with his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation

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but of ordinary skill and common sense.” Aaltonen et al. teaches that one of ordinary skill in the art would use ALD over CVD because of improved step coverage, uniformity, and thickness control (paragraph 0007). One of ordinary skill in the art would certainly find it within their technical grasp to use a CVD precursor in an ALD process with a reasonable expectation of success, given the advantages of using ALD in Aaltonen et al. and the precursors in Kawano et al. (See *KSR International Co. v. Teleflex Inc.*, 550 U.S.--, 82 USPQ2d 1385 (2007). It is clearly within the realm of the skilled artisan to use a CVD precursor with an ALD process, given that a CVD precursor is certainly within the technical grasp of one practicing ALD and ALD is a markedly improved process in most cases.

Further the applicant argues that Kawano et al. does not disclose the same compound as the applicants' for use in CVD, citing a section from the document. Though the document may contain other embodiments, it does not negate that Kawano et al. does contain embodiments where the claimed compound is used in CVD as cited in column 3 lines 39-59. As for the applicants' remaining arguments stating that the combination of references does not teach the limitations of the independent claims, the limitations of these claims are taught as discussed in previous office actions.

Therefore, for at least these reasons, the rejections of the previous office action are maintained.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY STOUFFER whose telephone number is (571)272-2668. The examiner can normally be reached on Monday - Thursday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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kms

/Timothy H Meeks/  
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